

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.15**SOURCE INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** SIR-001332**Date Inspected:** 14-Jun-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1200**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2359**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**Location:** Changxing Dao, Shanghai**Quality Control Contact:** William (Bill) Oak**Quality Control Present:** Yes No**Material transfer:** Yes No N/A**Sampled Items:** Yes No N/A**Stock Transfer:** Yes No N/A**OK to Cut:** Yes No N/A**Rebar Test Witness:** Yes No N/A**Delayed/Cancelled:** Yes No N/A**Other:** Coatings Inspection**Bridge No:** 34-0006**Component:** South Tower Lift #1, Miscellaneous Metal, S**Bid Item:** 77, 78, 79**Lot No:** B265**Summary of Items Observed:**

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE III coating inspector, Mr. James Lumley arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. The purpose of the coating inspections are to monitor the surface preparation and coating applications for the SAS Bay Bridge project. This QA NACE III coating inspector observed the following:

Miscellaneous Metal

Base metal surfaces of 400+- shim plates, splice plates, cover plates, and cable tray assemblies were abrasive blasted to an SSPC SP-10 condition and Interzinc 22 applied. Profile amplitude was 68-74um.

Miscellaneous Metal

Re-inspection performed on base metal surfaces after transport to paint shop. Defective cable trays non-SSPC SP-10 were removed from paint shop and transported back to blast shop for re-blasting. Previous inspection of cable trays difficult as units were buried within abrasive grit mounds inside blast workshop. ZPMC amended.

South Tower Lift #1

Interior base metal surfaces were abrasive blasted for grinding and VT operations. Surfaces from 18M-33M diaphragms are currently in a non SSPC SP-10 condition until all base metal defects have been corrected. VT performed by Caltrans QA Charlie Franco. ZPMC CWI performed MT on arc strikes.

Suspender Brackets

ZPMC notice of inspection to apply "mist coat" Interfine 979 to Interzinc coated surfaces in assembly yard on numerous suspender brackets. ZPMC personnel were in process of coating repairs with Interzinc 22 and Interzinc 52 as well as applying Sikaflex 221 around cope holes. Applied coatings insufficient cure/dry time to permit application of "mist coat"

Miscellaneous Metal

SOURCE INSPECTION REPORT

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Base metal surfaces of 530+- "H" splice plates "L" splice plates and suspender brackets were de-greased and water washed in preparation of abrasive blasting operations.

Suspender Brackets

Repairs were made to two (2) suspender brackets in trial assembly area due to improper coating applied to faying surfaces and excessive film build. Applied coating was removed via abrasive blasting to base metal and an SSPC SP-10 condition and Interzinc 22 re-applied.

South Tower Lift #1

Inspection of base metal repairs and grinding operations to interior surfaces from 18M -33M diaphragms revealed work still incomplete. Chloride testing was performed and chloride values were below 10ug/cm.

Note: All inspections were performed jointly with ABF & ZPMC QA/QC representatives and Caltrans QA Lumley. International Protective Coatings technical service representatives Mr. Peng ZiLi and Mr. Alpha Chen participated in the inspection process and were available for consultation.

Summary of Conversations:

ABF QA Dave Duon requested an NCR from Caltrans QA Lumley relative to work process in assembly yard on the suspender brackets. Mr. Duon Informed Caltrans QA Lumley that International Protective Coatings technical service representative Mr. Peng ZiLi was willing to allow ZPMC to overcoat with Interfine 979 upon uncured/dried Interzinc 22 and Interzinc 52 and Sikaflex 221 which was still in process application at time of inspection. Caltrans QA Lumley informed ZPMC that no "mist coat" of Interfine 979 would be permitted until previously applied coatings and caulking were dried in accordance with the manufacturers written recommendations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, (858) 699-9549, who represents the Office of Structural Materials for your project.

Inspected By:	Lumley,James
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Quality Assurance Inspector

Reviewed By:	Carreon,Albert
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QA Reviewer
